Vol 2257

No. 9746

United States

Circuit Court of Appeals

For the Ninth Circuit.

UNITED STATES OF AMERICA,

Appellant,

vs.

J. LESLIE MORRIS COMPANY, INC., a corporation,

Appellee.

Transcript of Record

(Plaintiff's Exhibits 1 to 32)

Upon Appeal from the District Court of the United States for the Southern District of California, Central Division.

PARKER PRINTING COMPANY, 545 SANSOME STREET, SAN FRANCISCO 40-8-28-41


MOROLOY
bearing service
J. LESLIE MORRIS CO. INC.
1361

Packages containing the rods for rebabbitting are received each day. They are shipped to Plaintiff corporation from three principal sources: automotive supply merchants frequently called "jobbers" (for example, Western Auto Supply Company, Chanslor and Lyon Stores, Collyear Motor Sales Company, et cetera) representing about 85 per cent of the rods received by Plaintiff corporation; commercial accounts (for example, Barker Brothers, Greyhound Stages, Baker Ice Machine Company, et cetera) representing approximately 10 per cent of the rods received by Plaintiff corporation, and automobile dealers (for example, Paul G. Hoffman Company, Howard Auto Company, Greer Robbins Company, et cetera) representing about 5 per cent of the rods received by Plaintiff corporation. When the various packages of rods are received they are piled at or near the doorway of Plaintiff corporation as shown (above). Each shipper does not make his shipments daily but are only sent to Plaintiff corporation when sufficient accumulation warrants their shipment. They are received in packages varying from one to one hundred rods per package, however, averaging from twenty to sixty rods per package. They are brought in by either shippers own delivery service, by parcel post, or by various light trucking companies, or delivery services. About ..... per cent of the rods sent in by automotive supply merchants i. e. "jobbers" are shipped to Plaintiff in Plaintiff corporation's boxes from which the rods rebabbited by plaintiff corporation have been sold. That is, the "jobber" in selling one of Plaintiff corporation's rods to a garage man or other purchaser removes from the box the rod delivered to him by Plaintiff corporation and takes the rod which the garage man has brought in for exchange and places it into the box from which Plaintiff corporation's rod was removed. This is only done for the purpose of enabling the "jobber" to keep the various sizes of rods segregated, otherwise in order to make up his invoice list for shipment to Plaintiff corporation it is usually necessary for the shipper to place an identification tag on the rod.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plt's Ex. No. 1. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.


4 GALS.
BRAKE

After the packages of rods are left at or near the door they are removed inside. Then each package is opened and the rods enclosed are checked against the shippers invoice and the invoice corrected if necessary (as shown above). Plaintiff corporation reserves the right to correct all invoices in accordance with the actual shipments of rods by customers. Any instructions for re-babbitting are removed from the package. About 10 per cent of the rods received call for a special specification or order for re-babbitting. This special specification or order is occasioned by the crankshaft having been worn or ground smaller so that the cap end of the rod must itself be smaller. As previously indicated many of the rods are shipped in Plaintiff corporation's boxes. If they are shipped loose the identification tags are removed from the rods. Then the boxes and tags removed from the packages are discarded.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 2. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.

The rods are then piled on a table in groups according to their respective sizes and the pin bushings are removed. These pin bushings are the bushings at the shank end of the rod. About one half of the rods rebattitted by Plaintiff corporation use pin bushings. The other half are of a clamp type shank end and using no such pin bushings this operation of removal is not necessary. And sometimes the instructions received read "Do not change bushings." These pin bushings are of two types: Those with a thin wall which cannot be pressed out and which must be therefore pounded out by means of a cold chisel and hammer as shown above while

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 3. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.

PLAINTIFF'S EXHIBIT No. 4

Other pin bushings have a heavy wall and are removed by use of an ordinary arbor press as shown above. It is much simpler and faster to remove the bushings in this manner.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 4. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.

On about one half of the rods it is necessary to remove the bolts and nuts which fasten the cap to the shank and replace these bolts and nuts with auxiliary bolts and nuts which have already been dipped in solder. The nuts and bolts so removed are placed in a box and later replaced on the rods in place of the auxiliary nuts and bolts when the rebabbitting process is completed. The same cap always goes back on the same shank otherwise in the centrifugal casting the babbitt will leak. However, on Ford products the bolts are not removed for the reason that no bolts are made, but rather, a stud has been forged with the shank and cannot be removed. However, the nuts are similarly changed and for the same reason as in the case of the other rods. The reason for this operation is that on about one half of the types of rods the nuts and bolts have never been immersed in solder, and it is desired to rebabbitt the rod so that its appearance resembles that of its original condition as nearly as possible. On the other one half of the rods, that is on the rods on which the nuts and bolts have previously to the time received by Plaintiff corporation been immersed in solder, there is no necessity for this operation, and the nuts and bolts are merely tightened if they are loose. The tightening of the nuts and bolts is accomplished by means of an ordinary hand socket wrench attached to a slowly revolving power driven spindle operated by means of a foot lever as shown above. The opposite end of this spindle revolves in the opposite direction and is used in loosening and removing the nuts and bolts, by the same type socket.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 5. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen. Deputy Clerk.

PLAINTIFF'S EXHIBIT No. 6

Then the babbitt is melted from the bearing end of the rod by placing that end into a low temperature pot of molten babbitt which the night man prepares by lighting the oven at approximately five o'clock in the morning in preparation for the days run. It is heated with an ordinary gas stove burner. This operation is illustrated in the right half of the above picture. After most of the babbitt is removed by this method, the remainder of the adhering babbitt or dross which sometimes clings to the rods is removed by dipping them into the dross pots shown to the left in the above picture. The dross pots keep a solution of molten babbitt at a higher temperature. In order to keep the babbitt at a sufficiently high temperature three approximately one half gallon pots are used. The reason for the babbitt being removed by two operations is that the babbitt in the low temperature receptacle may be used by Plaintiff corporation for rebabbitting, while the higher temperatures in the dross pots spoil the babbitt for such use.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 6. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.

PLAINTIFF'S EXHIBIT No. 7

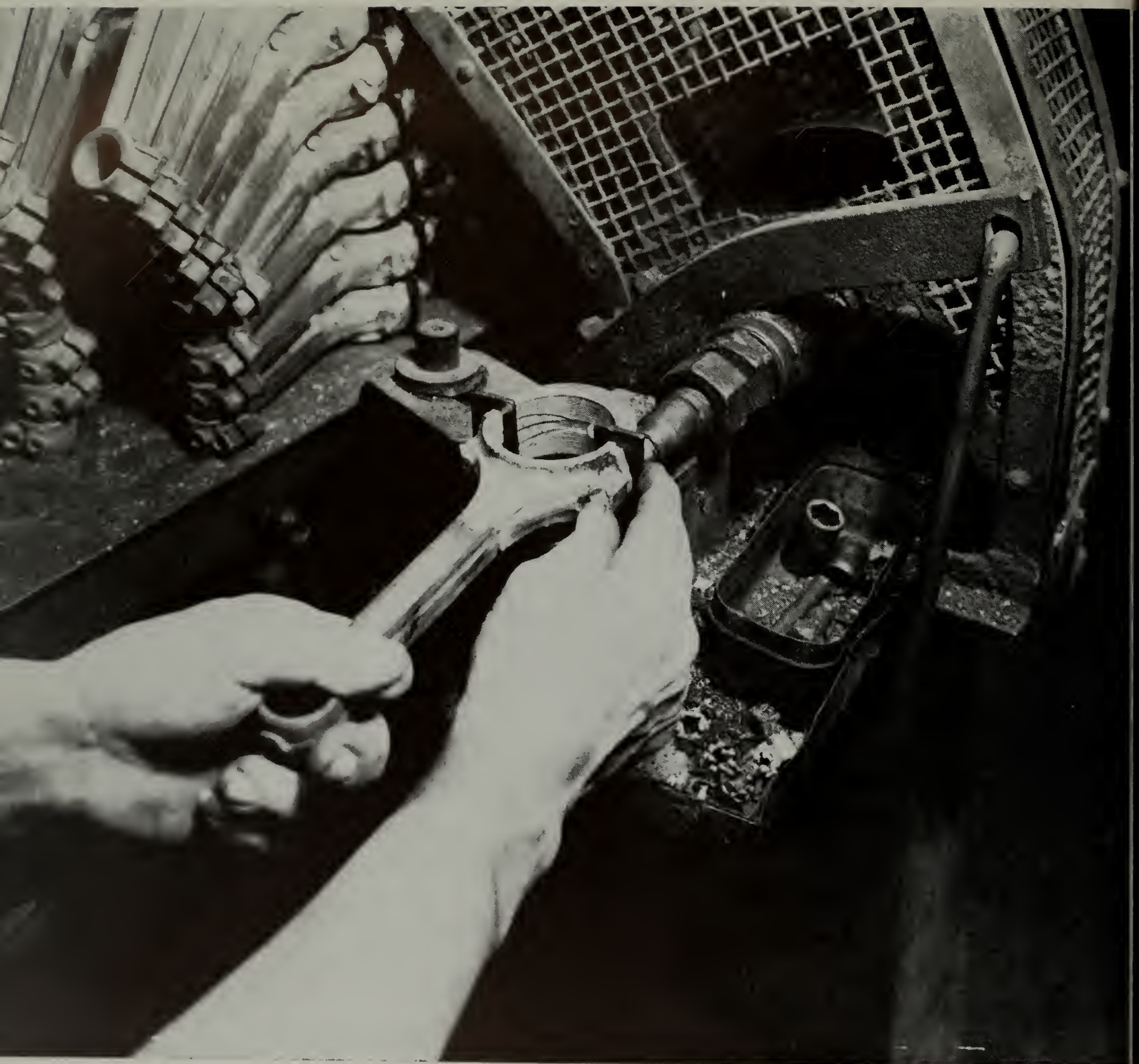
Close-up of operation illustrated in picture 6.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 7. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.

PLAINTIFF'S EXHIBIT No. 8

After any remaining babbitt is chipped off with a chisel, the bearing end of the rod is then dipped into a solution of hydrochloric acid. The acid acts as a cleaning agent. The acid vat is under the wooden cover shown at the right in the above picture. Then the bearing end of the rod is dipped into a molten tin or solder shown on the left in the above picture. This solder or tin acts as a flux or bond when the babbitt is cast against it.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 8. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.



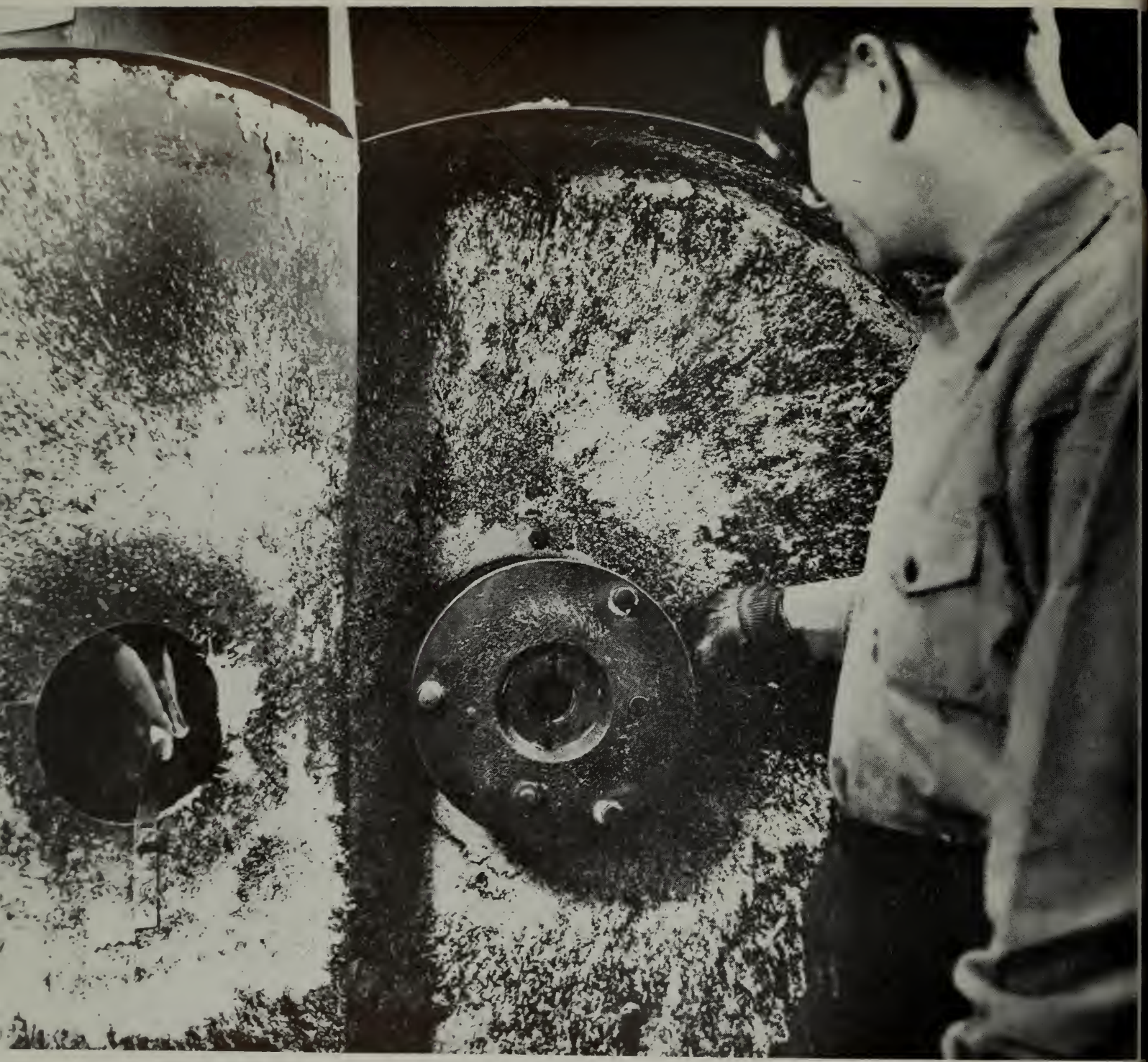
Then the nuts are removed from the bolts holding the cap to the bearing end of the rod and by means of a sharp blow the cap is removed from the bearing end of the rod, and a steel separator is inserted between the cap and the bearing end of the rod on each side where the cap joins the rod as shown above. These separators prevent the rod and cap from casting together when the babbitt is rebabbitted. The same power driven socket wrench described in picture number 5 is used for the removing of the nuts and for the replacing of the nuts when the separators have been inserted. Separators are not used in rebabbitting rods for Model A Ford engines for the reason the cap is cast to the bearing end of the rod.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 9. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.

PLAINTIFF'S EXHIBIT No. 10

Any oil holes appearing in various places on the cap or the bearing end of the rod (varying with the type of rod) are plugged with asbestos wicking as shown above. In some instances small cork stoppers are used and even toothpicks on the smaller rods. This caulking process prevents the babbitt from plugging up the oil holes.

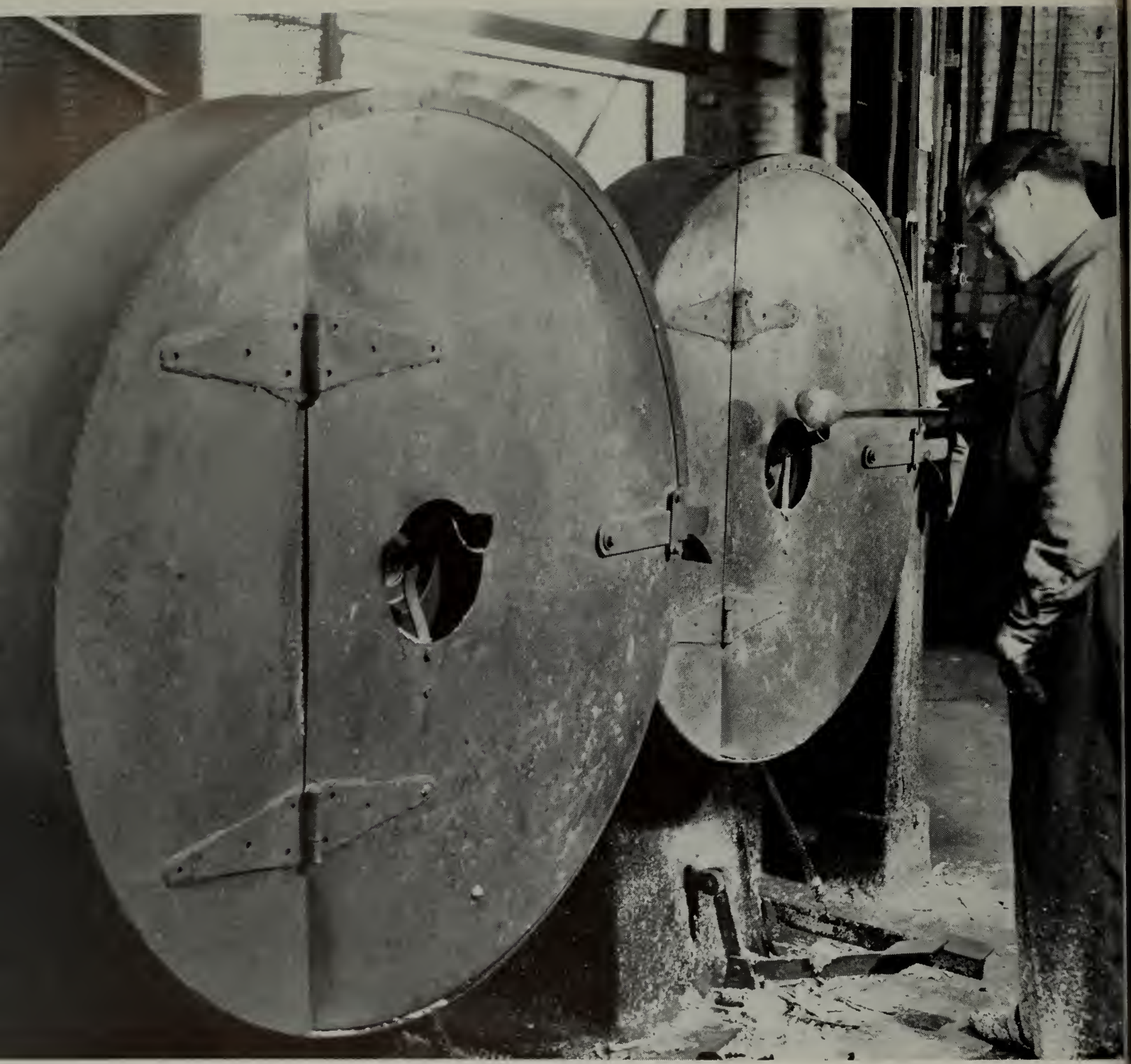
[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 10. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.



PLAINTIFF'S EXHIBIT No. 11

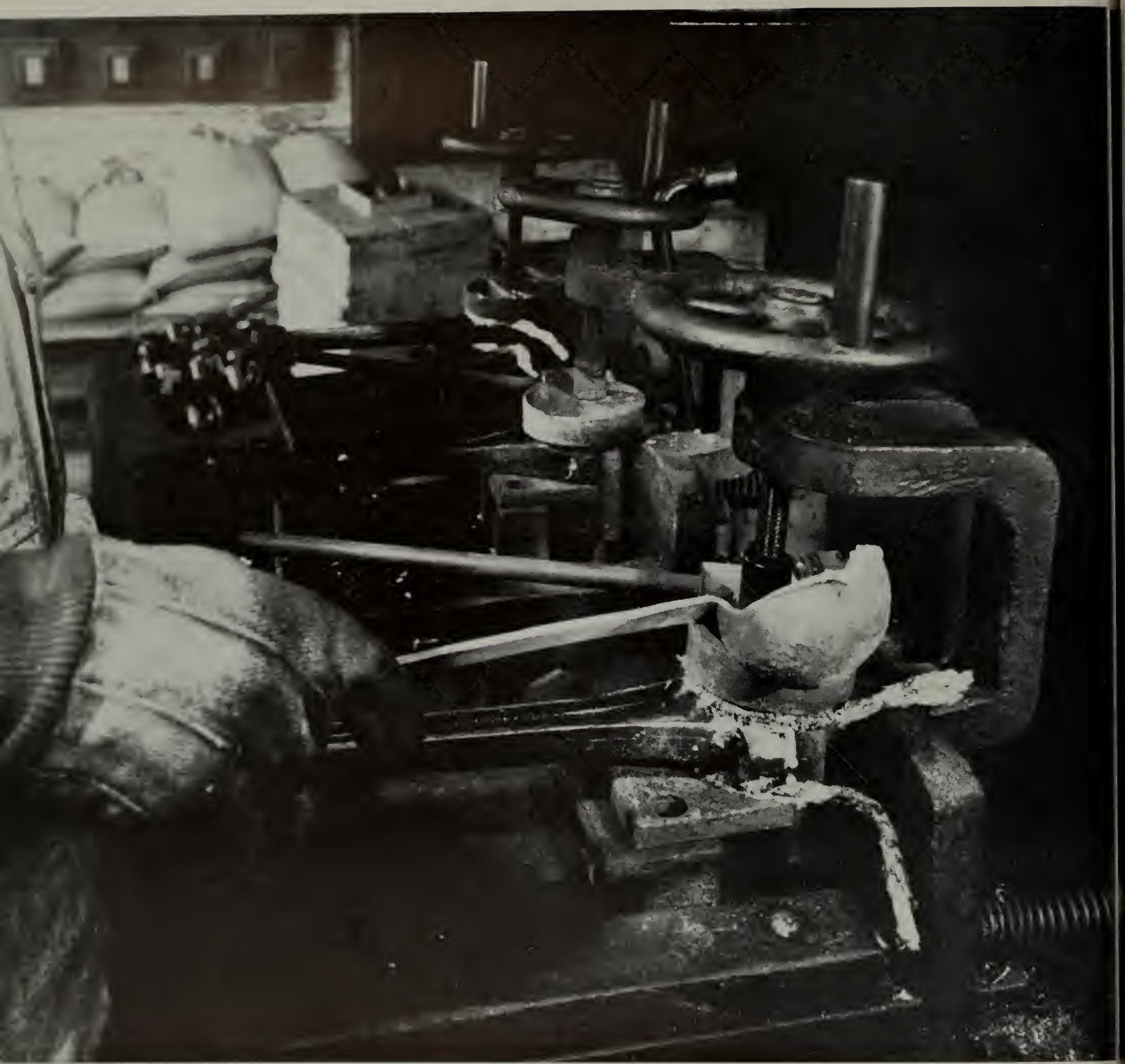
The rods are then taken to the centrifugal casting machines which were built by Plaintiff corporation for its own use. There are two of these machines because it takes the babbitt about fifteen seconds to cast and thus one operator can run the two machines. Each of these centrifugal casting machines consists of a revolving shaft on which is mounted a mold holder shown above. This mold holder is opened by means of a foot lever and the bearing end of the rod is placed between the molds which cup over each side of the bearing end. The illustration above shows the operator with his right hand covering the shank end of the rod with the bearing end in between the open mold. When the foot lever is released the outer part of the mold seen in the picture snaps back against the bearing end of the rod holding the rod securely so that it makes a perpendicular axis to the shaft on which the mold holder is mounted.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 11. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.



The mold holder is incased inside a pancake shaped container which is mounted perpendicular to the floor. The center of the door to the container has a hole in it approximately eight inches in diameter. Through this aperture a small trough is affixed as shown above. The small end of the trough leads down into the outer face of the mold which is open. Then when the rod has been set in the mold holder as previously described, the door of the container is closed, and by means of a foot lever the shaft and mold start to revolve spinning the rod with the bearing end as an axis. As the shaft, mold and rod are spun, an operator pours molten babbitt into the trough. The babbitt runs down into the bearing end of the rod and the centrifugal force spreads it evenly over the inside curved surface of the bearing and of the rod.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 12. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.



PLAINTIFF'S EXHIBIT No. 13

A certain percentage of the rods must be rebabbitted by hand —about 20%.

In this operation the man who does the hand-casting dips his own rods in the acid and tin for the reason that the place where he works is too far away from the ordinary dipping pit. In the hand-casting the cap is cast separately from the shank by placing either the cap or the shank flat between two molds which cup on each side of either the shank or cap. Between the rod and the mold there is wedged an asbestos wicking to prevent leaks; then the operator pours the molten babbitt through a hole in the top of the mold and it drops through to the inside of either the cap or the shank, whichever part is being babbitted. The surplus babbitt is then chipped off by an operator.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 13. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.

PLAINTIFF'S EXHIBIT No. 14

Then the rods are dipped into an oakite tank as shown above for cleaning.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 14. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.

PLAINTIFF'S EXHIBIT No. 15

Then the steel separator shims are removed by the means of the socket wrench shown in picture number five, and any auxiliary nuts and bolts are removed and the originals replaced.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 15. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.

PLAINTIFF'S EXHIBIT No. 16

However, before the cap is fastened to the bearing end of the rod any ragged edges of babbitt which may have adhered where the shims separated the cap from the bearing end of the rod are removed by holding the open face of the cap or the open face of the bearing end of the rod against the revolving sandpaper disc as shown above.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 16. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.

PLAINTIFF'S EXHIBIT No. 17

The cap is replaced on the rod using the original bolts and nuts, the removal of which was described in Picture 5. A power driven socket wrench is used in performing this operation.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 17. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.

PLAINTIFF'S EXHIBIT No. 18

The operator cleans out the oil holes by use of a drill press as shown in this picture.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 18. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.

PLAINTIFF'S EXHIBIT No. 19

The oil holes are not always the same size. Accordingly, the operator uses a second drill press with a larger drill to perform the same operation shown in Picture 18. This removes the necessity for frequently changing drills.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 19. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.

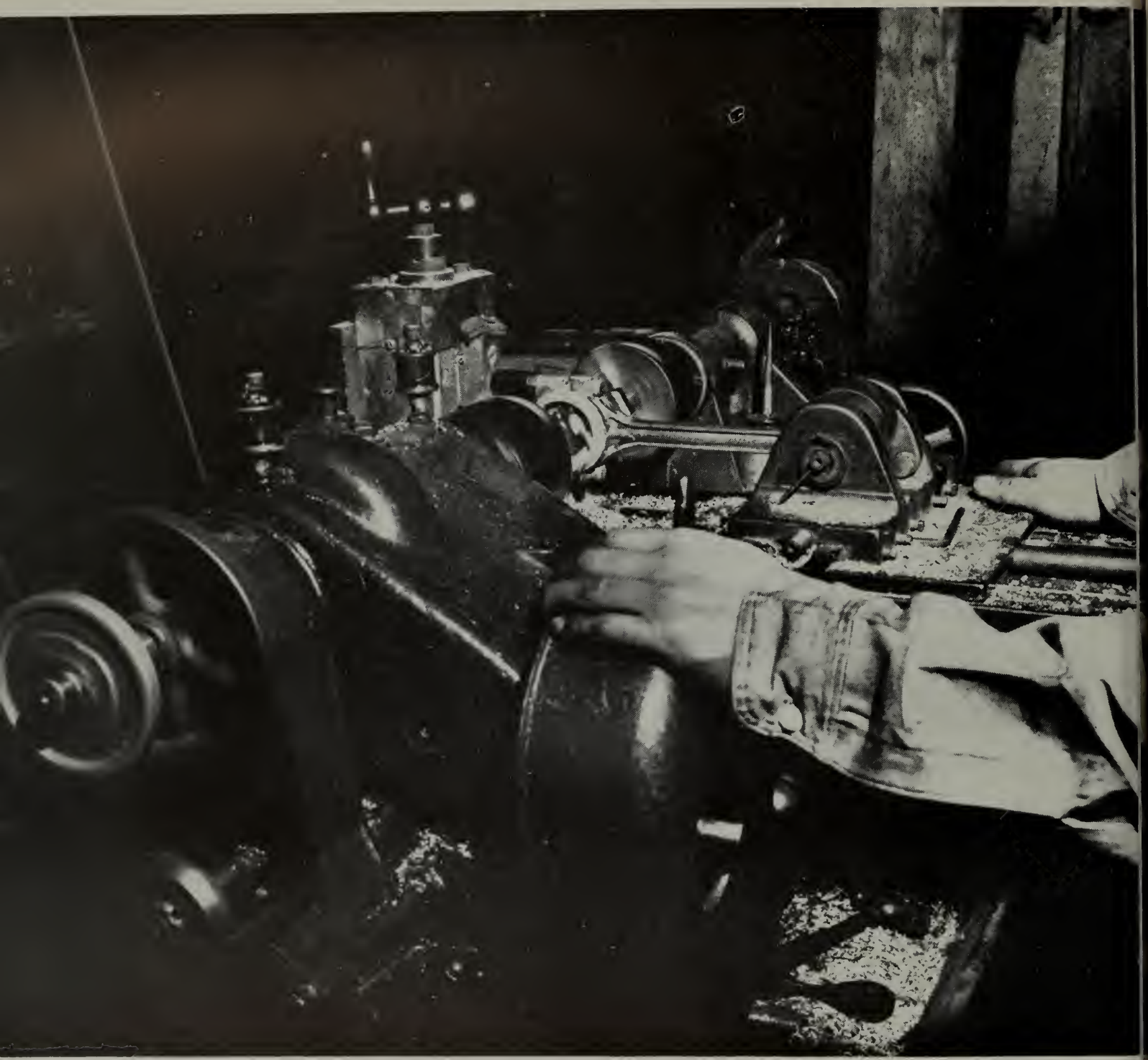
PLAINTIFF'S EXHIBIT No. 20

The rods are now dipped in a rust preventative and are then hung on a rack to dry,—as shown in above picture.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 20. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.

The rod is now placed in a lathe and the babbitt is bored, faced and chamfered. The latter two operations finishes the bearing to standard width.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 21. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.



PLAINTIFF'S EXHIBIT No. 22

The lathe used in the above picture is identical with the one shown in Picture 21, however it is used for finishing babbitt bearings to special undersizes as ordered by the customer. About 20% of the connecting rods rebabbitted by the plaintiff are bored to special undersizes for the reason that the crankshafts of the automobiles in which they are to be placed have been reground in order to correct for the wear which has resulted from long operation.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 22. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.

PLAINTIFF'S EXHIBIT No. 23

Approximately fifty per cent of the bearings have oil pockets which are cut by a hand milling machine as shown in the above picture.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 23. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.

PLAINTIFF'S EXHIBIT No. 24

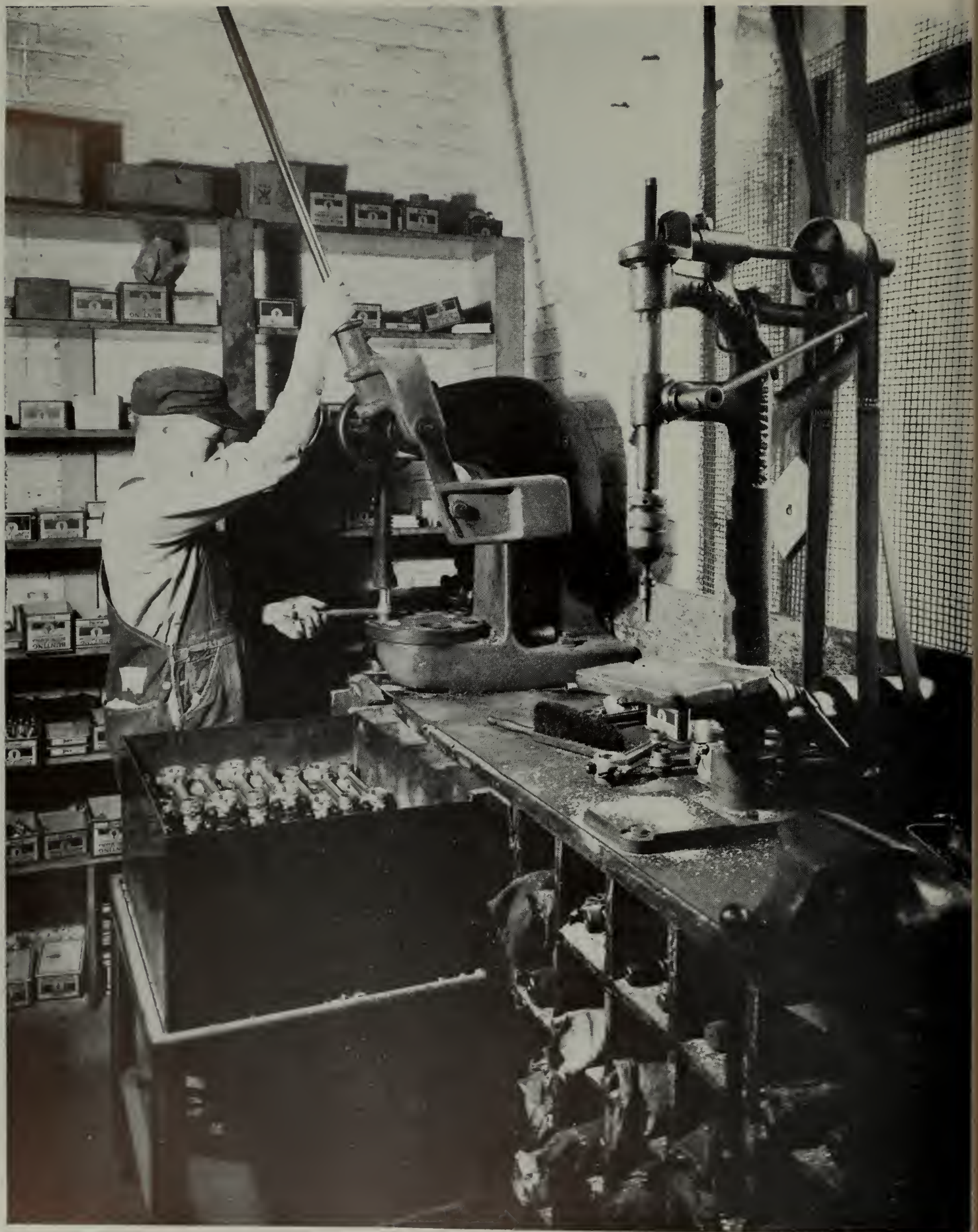
On Model A Ford connecting rods in which the babbitt was cast without the use of separator shims, it is necessary to cut the babbitt through the center of the bearing in order to free the cap from the shank. This operation also leaves an oil groove or relief which facilitates lubrication. This operation is performed by a slotting tool as shown in the above picture.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 24. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.

PLAINTIFF'S EXHIBIT No. 25

The Model A connecting rods are now on a saw table in which a rotating saw blade cuts the babbitt flange to complete the separating operation as shown in Picture 24. This also cuts the necessary oil relief groove through the flange.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 25. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.



PLAINTIFF'S EXHIBIT No. 26

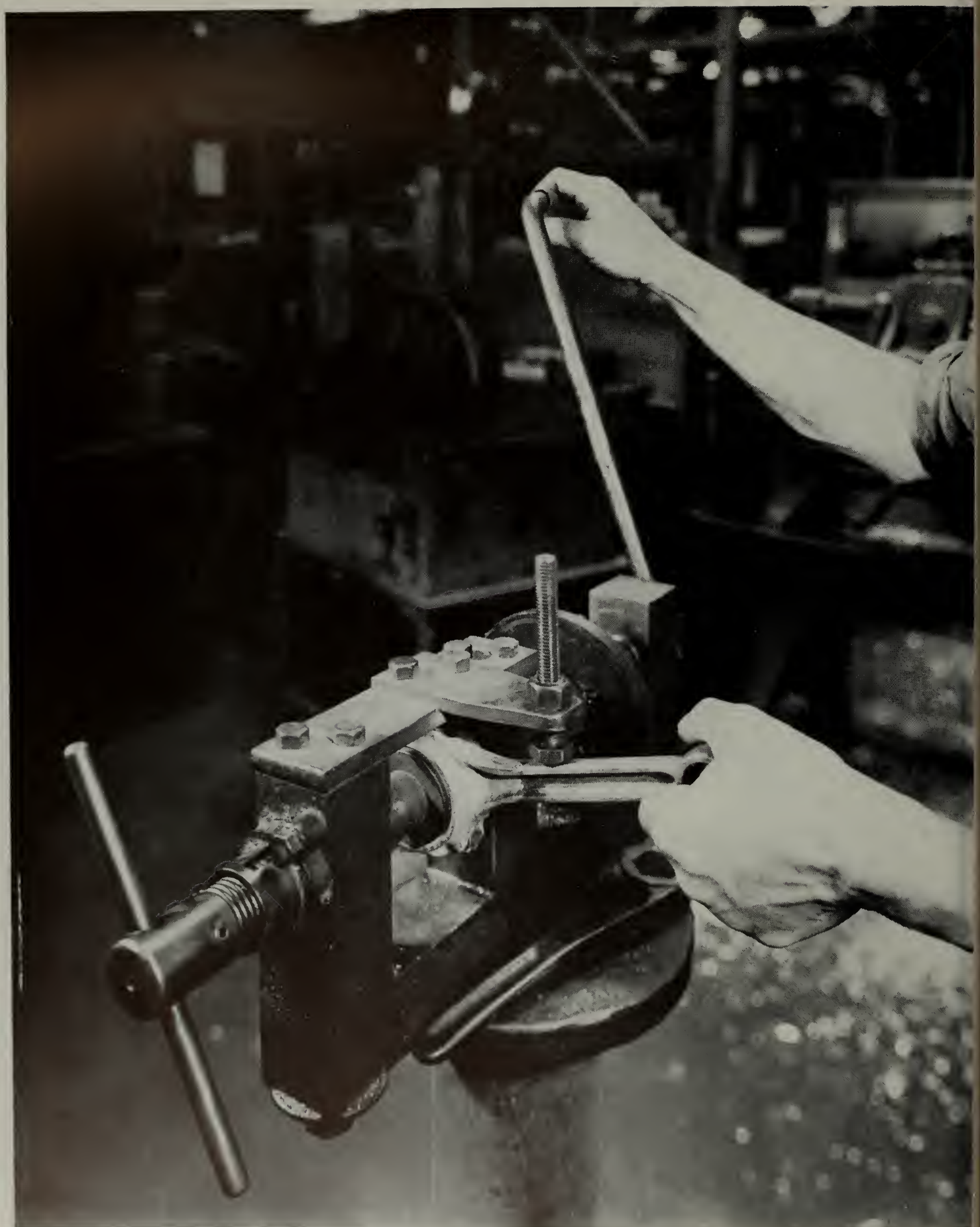
About one half of the connecting rods rebabbitted require new bushings in small end of the shank. These are installed by a hand operated arbor press, as shown above.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 26. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.

PLAINTIFF'S EXHIBIT No. 27

The outer edge of the babbitt flange is now faced by a special tool placed in a drill press. Approximately 50% of the rods rebabbitted were of a type that required this operation, which is shown in the above picture.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 27. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.



PLAINTIFF'S EXHIBIT No. 28

All Model A Ford and six-cylinder Chevrolet rebabbitted connecting rods require an oil groove on the face of the bearing which is cut in the shape of a figure 8 by hand operated oil groover as shown in the above picture.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 32. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.

PLAINTIFF'S EXHIBIT No. 29

Certain Pontiac bearings require a continuous oil groove around the center, which is cut by the center oil groover shown in the above picture.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 29. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.


MACHINE

PLAINTIFF'S EXHIBIT No. 30

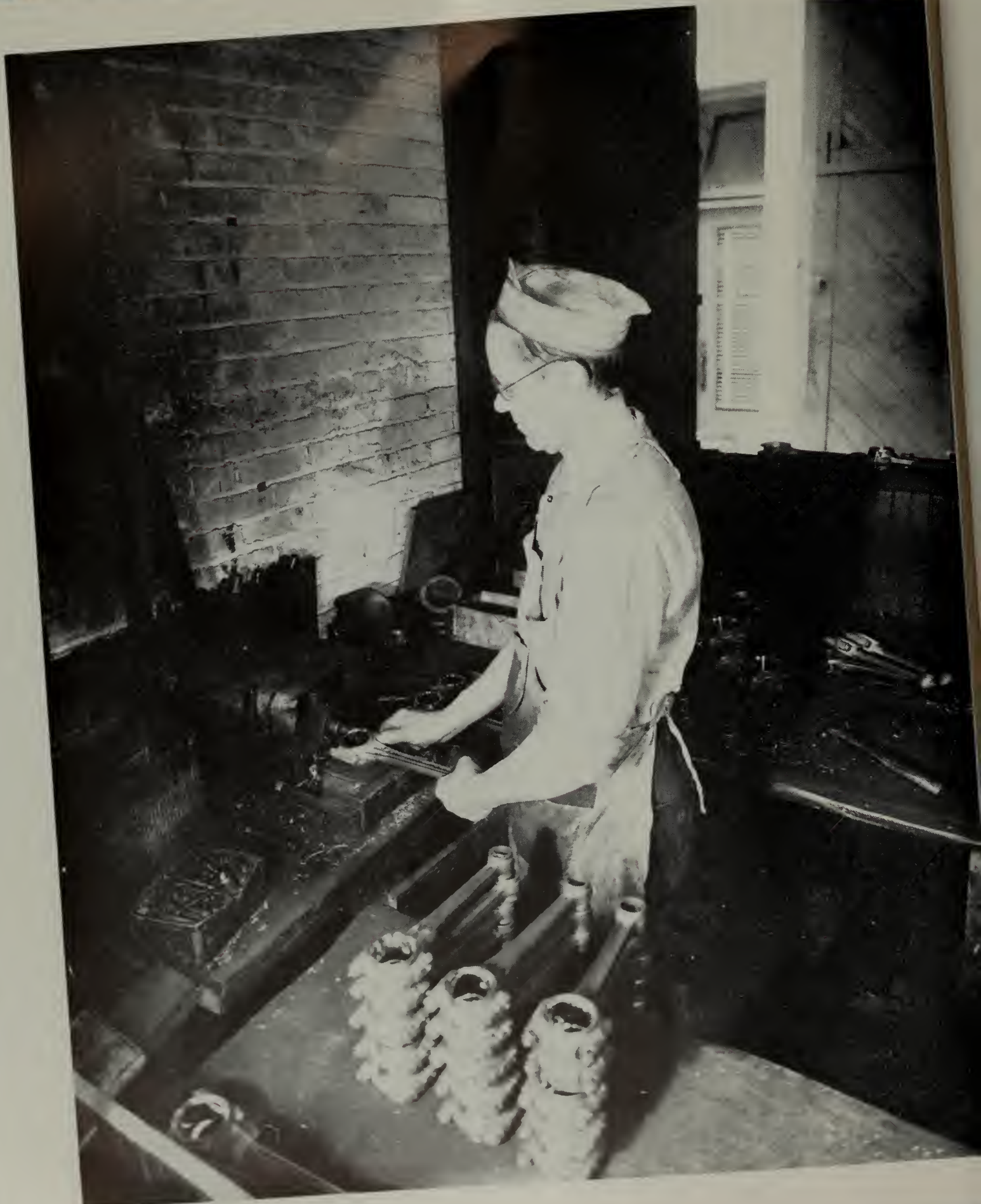
All babbitt bearings except the twenty per cent which are finished to special undersize on the lathe shown in Picture 22 are now finished to size by a hydraulicly operated broaching machine as shown in the above picture. The broaching tool which is used for this operation is held in the workman's right hand. It is composed of a number of horizontal cutters each of which removes about .0005 as the tool is forced through the bearing by the hydraulic pressure.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 30. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.

PLAINTIFF'S EXHIBIT No. 31

Model A Ford connecting rods are fitted with a very thin bushing which becomes somewhat damaged and burred when being pressed in by the arbor press shown in Picture 26. This is corrected by placing the connecting rods in a bench drill press in which a chamfering tool is used as shown in the above picture.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 31. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.



PLAINTIFF'S EXHIBIT No. 32

All connecting rod bearings are now given a final inspection and the nuts holding the connecting rod caps in place are loosened to enable the workman to make certain that the bolt or stud threads have not been stripped. The nuts are loosened by a power operated socket wrench as shown in the above picture.

[Endorsed]: No. 433—M. Morris Co. v. U. S. A. Plf's Ex. No. 32. Filed 5/29/40. R. S. Zimmerman, Clerk. By B. B. Hansen, Deputy Clerk.